

## **PROCESS FOR MAKING ENGINEERED LIGNOCELLULOSIC-BASED PANELS**

### **5 ABSTRACT OF THE DISCLOSURE**

A process for making engineered lignocellulosic-based panels with superior strength and dimensional stability. The process comprising adding to green lignocellulosic particles a low-nitrogen content, high molecular weight, phenol-formaldehyde resin before the green particles are dried. The resin is added in an amount  
10 from about 1 to 25 weight percent based on the dry weight of the green lignocellulosic particles. The resin has a nitrogen content of from about 0 to 3%, a viscosity of from about 20 to 2000 cps at 20°C, and a molar ratio of formaldehyde/phenol of from about 1.2 to 3.0. The green lignocellulosic particles treated with the resin are dried until the particles have a moisture content of from 1 to 8 %. A second resin is added to the dried particles  
15 and then the dried particles are consolidated under heat and pressure to form the engineered panel.